

Compassionate and Innovative Care for Moms and Infants Impacted by Opioid Use Disorder: Myths and Truths

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Disclosure

- None

Objectives

- Understand impact of opioid use disorder on women, infants and families
- Discuss misconceptions and truths
- Innovative care for infants affected by opioid exposure
- Ways to promote compassionate and trauma-responsive communication and care

Opioid Epidemic in Women - Truths

- ◆ *1999 – 2015: Prescription opioid OD increased 471% women vs 218% men*
- ◆ *1999 – 2015: 850% increase in synthetic opioid-related deaths in women*

In 2016, women of childbearing age (15–44) who reported:

Past-month heroin use

- 141,000 in 2016
 - 0.1% increase from 2015
 - Of those, approximately 2,000 women were pregnant
- Past-month use of opioids (including heroin or pain reliever misuse)
 - 1,090,000 in 2016
 - 1.49% increase from 2015

Opioid Epidemic in Women - Truths

- 21% of women fill a Rx for opioids during pregnancy and 2.5% fill chronic prescriptions > 30 days
- 4-5% of 15-44 yo pregnant women report nonprescription drugs in pregnancy with opioids being the second most prevalent illicit substance second to MJ
- 4/5 women who use heroin began with misuse of Rx opioids
- 1 in 300 opioid naïve women will become persistent opioid users in 1st year postpartum -> half a million new persistent opioid users annually

- 2012: 259 million opioid Rx annually in the US
 - More than one for every American adult
- Increase in SUD with hx of prescription opioid misuse 2% to 28% from 1992 to 2012

DRAMATIC INCREASES IN MATERNAL OPIOID USE AND NEONATAL ABSTINENCE SYNDROME

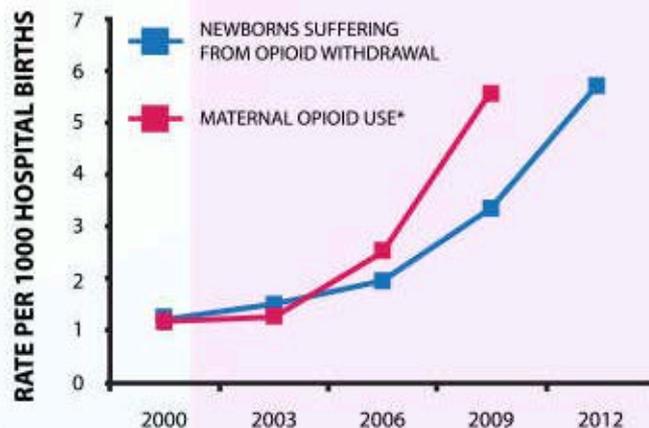


**EVERY 25 MINUTES,
A BABY IS BORN SUFFERING
FROM OPIOID WITHDRAWAL.**

AVERAGE LENGTH OR COST OF HOSPITAL STAY



NAS AND MATERNAL OPIOID USE ON THE RISE



Myth #1 – Addiction is a choice

- Addiction (WHO & ASAM) Definition:

“Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.”

Truth #1 – Addiction is not a choice

The disease drives the behaviors you associate with opioid dependence, not the other way around.



Myth #2 Addiction is a moral failure

Looking in retrospect: 1998 physician survey on illicit drug use during pregnancy: OB 43%, FP 49%, Peds 55%.

- 52% of physicians - favor illicit drug use during pregnancy as child abuse for purpose of removing child from maternal custody
- 80% - believed treatment of substance use disorder should be a condition of probation
- 34% FP, 23% Peds, 27% OB- were in favor of incarceration
- 90% - highly favor compulsory treatment
- 50% - court ordered contraception

Myth #2 Addiction is a moral failure

2013 physician survey: Beliefs about nature/model of addiction

PCP's Response	Moral Model	Psych Model	Disease model
Not at all	34%	2%	3%
A little	29%	14%	9%
Somewhat	30%	51%	39%
A lot	7%	33%	51%

80%: agreed with psych and disease model

37%: still responded “somewhat” or “a lot” to the moral model

Truth #2 Addiction is not a moral failure

- McCarthy M. US must address addiction as an illness, not as a moral failing, Surgeon General says. *BMJ*. 2016 Nov 22;355:i6265. doi: 10.1136/bmj.i6265. PubMed PMID: 27879255.
- Lawrence RE, Rasinski KA, Yoon JD, Curlin FA. Physicians' Beliefs about the nature of addiction: a survey of primary care physicians and psychiatrists. *Am J Addict*. 2013 May-Jun;22(3):255-60. doi: 10.1111/j.1521-0391.2012.00332.x. PubMed PMID: 23617868.
- Terplan M, Kennedy-Hendricks A, Chisolm MS. Prenatal Substance Use: Exploring Assumptions of Maternal Unfitness. *Subst Abuse*. 2015 Sep 20;9(Suppl 2):1-4. doi: 10.4137/SART.S23328. PubMed PMID: 26448685; PubMed Central PMCID: PMC4578572.

Truth #2 Addiction is not a moral failure

“The assumption that prenatal substance use constitutes maternal unfitness adversely has impacts on maternal, child, and family health by deterring pregnant women from seeking both obstetrical care and SUD treatment.”

“The belief that a substance-using pregnant woman is failing to protect an innocent other, and thus, deviating from the social norms surrounding motherhood, positions the woman as an adversary of the developing fetus.

“We are physicians writing for physician readers. As such, we believe that it should be accepted, res ipsa loquitur, that drug use is a medical condition, not a moral failing.”

Myth #3 “Addiction just happens”

- Women with substance use disorders are more likely to have:
 - Family history of addiction or mental health problems
 - Friends, family, and intimate partners with addiction
 - Poverty, homelessness, food insecurity, limited transportation
 - Domestic/IP violence
 - Psychosocial chaos

Myth #3 “Addiction just happens”

Strong relationship between:

- adverse childhood experiences
- genetics
- chronic medical conditions
- opioid prescriptions
- social support
- trauma

And

High-risk behaviors and addiction

Myth #3 “Addiction just happens”

- 13,494 adults in general medical clinic of large HMO surveyed at “health appraisal clinic”
- Mailed a survey asking about adverse childhood experiences (ACES)
 - Physical, psychological, sexual abuse
 - Violence against mother (DV by proxy)
 - Living in household with a person abusing substances, mentally ill, or suicidal
 - Living in household with anyone ever imprisoned
- The number these adverse childhood experiences was then compared to measures of adult risk behavior, health status, and disease

Adverse Childhood Experiences

“ The seven categories of adverse childhood experiences were strongly interrelated and persons with multiple categories of childhood exposure were likely to have multiple health risk factors later in life”

- Increased # of ACES significantly associated with increased # adult health risk behaviors and diseases ($P < .001$)
- Individuals > 4 ACES
 - **4-to 12-fold risk for alcoholism, substance use, depression, and suicide attempt**
 - **2- to 4-fold increase in tobacco smoking, poor self-rated health, >50 sexual intercourse partners, and sexually transmitted disease**
 - **1.4- to 1.6-fold increase in physical inactivity and severe obesity.**
- Ischemic heart disease, cancer, chronic lung disease, skeletal fractures, and liver disease.

Adverse Childhood Experiences

“A comprehensive assessment of children's health should include a careful history of their past exposure to adverse conditions and maltreatment. Interventions aimed at reducing these exposures may result in better child health”

Truth #3 Addiction does not “just happen”

High-risk behaviors and addiction -> strong relationship between violence and trauma.

- 95% serious sexual, physical, or emotional abuse as child or adult
- 80% major mental illness (most prevalent PTSD—77%)
- 72% felt unable to reduce alcohol use due to being in an abusive relationship

Truth #3 Addiction does not “just happen”

Trauma Informed/Responsive Care

“Universal Precautions” (especially important for pregnant women with SUD)

- **Realize—Recognize—Respond--Resist**
- Most have been exposed to abuse, violence, neglect, or other trauma
- Assume she is coping the best she can
- Place priority on providing safety, choice, and control
- The mother’s feelings are her work, not yours

Trauma Informed Practice — Changing the Conversation

“What is wrong with this woman?” ->

“What happened to this woman?”

“I just need to show her how bad using in pregnancy is.” ->

“I need to show her that it’s safe for her to share what’s happening in her life and that I am able to support her.”

“She doesn’t care about her baby.” ->

“She’s making decisions to keep herself and her baby safe.”

Motivational Interviewing

- A person-centered approach to talking about change
- Eliciting behavior changes by exploring and resolving ambivalence
- Rooted in openness, empathy
- Emphasizes autonomy
- Compassion, presence
- Collection of specific skills **OARS+I**
 - Open-ended questions
 - Affirmations
 - Reflections
 - Summaries
 - Asking permission to provide Information

Myth #4 “I know I can do it on my own”

- Pregnancy is a crisis. It launches an imagined future that is not compatible with a current pattern of substance use
- Pregnancy is an opportune time to seek help and engage in treatment

I Can Do It!



Truth #4 “I know I can do it on my own”

- Pregnancy - Imagined future is a call forward and is often embraced with great determination.
- ***Truth:*** Unfortunately the nature of addiction is that determination itself may not really help you stop using.

Myth #5

Your “addict” is your barrier to care

- Women with substance use disorder may suffer from:
 - Mental health co-morbidities: PTSD, anxiety, depression, bipolar disorder (2x population risk)
 - Infectious complications: Hepatitis, HIV, STI's, bacterial infections
 - Untreated medical problems: liver disease, HTN, diabetes, poor dentition, poor nutrition
 - Injuries or acquired medical problems: collisions, fall/trauma injuries, DVT, assaults

Myth #5

Your “addict” is your barrier to care

- ***Truth: Many Barriers to Care:***
 - Fear of judgment or legal consequence
 - Mistrust
 - Lack or limited resources
 - Limited family or community support, isolation
 - Poor past experiences with the medical system
 - Stigma
 - Healthcare provider bias
 - Healthcare provider lack of knowledge/understanding

Shared goals: safe pregnancy and healthy baby

Truth #5

You can help remove barriers to care

The mother wants
prenatal care and a healthy baby

*Compassionate, trauma-informed
approach and openness are
crucial!*

Myth #6 All you need is detox

Opioid detoxification during pregnancy

Stewart et al, 2013

- N=95 pregnant women detoxed with methadone
 - 53% patients successfully completed detox
 - 32% left the study
 - **3 fetal demises in 95 patients and 2 were in women that left the program.**

Jones et al, 2017

- Reviewed 500 documented cases of opioid detox
- Opioid detoxification associated with:
 - Less time in treatment, fewer prenatal care visits, less likely to deliver at study hospital
- No fetal losses attributed to medically assisted withdrawal
- Relapse 17-96% (average 48%)

Truth #6 All you need is not detox

Opioid detoxification during pregnancy

- Detoxification not recommended because:
 - Decreased neonatal birth weight
 - Decreased prenatal care
 - Illicit drug relapse
 - Resumption of high risk behaviors (IVDU, prostitution, criminal activity)

Medication for Addiction Treatment (MAT) with methadone or buprenorphine

- ***Reported success rates 63-82%***
- ***FYI same success rates of other chronic disease like asthma and DM***

Myth #7 Medication for Addiction Treatment is trading one drug for another



Opioid use disorder and Physical Dependence

- **Opioid use disorder (DSM V)**

Problematic pattern of use leading to clinically significant impairment or distress (in past 12 mo)

1. Taken in larger amounts or longer duration
2. Desire to cut back or unsuccessful efforts to cut back
3. Great deal of time obtaining, using, or recovering
4. Craving, strong desire, urge
5. Recurrent use resulting in failure to fulfill obligations
6. Continued use despite persistent or recurrent social or intrapersonal problems

Opioid use disorder and Physical Dependence

- **Opioid use disorder (DSM V)**

Problematic pattern of use leading to clinically significant impairment or distress (in past 12 mo)

7. Give up important social, occupational, recreational activities
8. Recurrent use in physically hazardous situations
9. Continued use despite knowing physical or psychological problems
10. Tolerance*
11. Withdrawal*

Opioid use disorder and Physical Dependence

- **Physical dependence**
 - **Tolerance:** loss of effect after repeated use, leading to need for higher doses to achieve desired effect
 - **Withdrawal:** constellation of unpleasant symptoms that occur after abstinence to a substance
- You can have a opioid use disorder without physical dependence

American College of Obstetricians and Gynecologists

Opioid Use and Opioid Use Disorder in Pregnancy 2017

For pregnant women with an opioid use disorder, opioid agonist pharmacotherapy is the recommended therapy and is preferable to medically supervised withdrawal because withdrawal is associated with high relapse rates, ranging from 59% to more than 90%, and poorer outcomes.

Relapse poses grave risks, including communicable disease transmission, accidental overdose because of loss of tolerance, obstetric complications, and lack of prenatal care.

Medication for Addiction Treatment

Methadone and buprenorphine is the evidence-based standard of care for opioid use disorder; improves obstetrical outcomes

- MAT opioid exposure in utero does not appear to be linked with birth defects or neurocognitive deficits in children
- Illicit opioid use during pregnancy is associated with poorer obstetrical outcomes

Medication for Addiction Treatment

The dilemma of methadone / buprenorphine in pregnancy is we have to accept that opioid use disorder is a real problem that we can neither wish nor will away.

Myth #8 “I need to keep my dose as low as possible for my baby”

- *Buprenorphine is associated with less incidence, less severe, and shorter NAS*
- *Methadone is associated with improved retention in treatment*

Truth: Methadone/buprenorphine dose is not associated with NOWS severity:

- Meta-analysis of 29 studies
- Less NAS with 20-40 mg overall
- No difference in risk when comparing the prospective studies or in studies with objective scoring tools

Myth #9 “I don’t want my baby born addicted”



Truth #9 Babies are not born addicted!

Pearls:

- Explain evidence-based therapy with methadone or buprenorphine as a healthy treatment and choice
- Provide education on NOWS/NAS
- Prepare and set expectations; set common goals
- Normalize care and let mother to be mother
- Bonding, rooming in and skin to skin, breastfeeding, self care, family, support, MAT stability
- When it's done, it's done

Neonatal Opiate Withdrawal Syndrome (NOWS)

- NOWS rates: fivefold increase, from 2.8 per 1000 births in 2004 to 14.1 per 1000 births in 2014 (TNA Winkleman, AAP 2018)
- Sharp increase in health care spending due to increase in hospital length of stay (\$1.5-\$2.0 billion 2012-14)
- Protecting Our Infants Act-> focus on maternal opioid use and NOWS
- Treatment recommendations limited to hospital settings
- Much less focus on discharge planning
- Recently more emphasis on holistic, non-pharmacological approaches

Neonatal Opiate Withdrawal Syndrome (NOWS)

- Signs and Symptoms
 - Sneezing more than 3X in a row, yawning
 - Digestive issues: vomiting, diarrhea
 - Poor eating/feeding, disorganized
 - Inconsolable crying, tremors
- Methadone
 - Symptoms typically noticed 12 hours after delivery
 - Average Hospitalization – 20 days; some more, some less
 - Not dose dependent
- Buprenorphine (Subutex/Suboxone)
 - See less withdrawals versus Methadone
 - Symptoms may be delayed - potential readmission
 - Not dose dependent

Current Treatment: Finnegan Scoring

- Developed in 1974. Most common withdrawal symptoms assigned points based on perceived severity
- Escalation of consecutive scores are an indication to begin and titrate medication
- The rationale for using a score based approach for medication initiation: not scientifically validated

Problems:

- Scoring system does not focus on how those infant's ability to function
- Increased use of opiates in babies
- Prolonged length of stay. Staff fatigue
- Concern for shift to shift variation in scoring

DATE:	SCORE	TIME								
High pitched cry: inconsolable >15 sec. OR intermittently for <5 min.	2									
High pitched cry: inconsolable >15 sec. AND intermittently for ≥5 min.	3									
Sleeps <1 hour after feeding	3									
Sleeps <2 hours after feeding	2									
Sleeps <3 hours after feeding	1									
Hyperactive Moro	1									
Markedly hyperactive Moro	2									
Mild tremors: disturbed	1									
Moderate-severe tremors: disturbed	2									
Mild tremors: undisturbed	1									
Moderate-severe tremors: undisturbed	2									
Increased muscle tone	1-2									
Excoriation (indicate specific area):	1-2									
Generalized seizure	8									
Fever ≥37.2°C (99°F)	1									
Frequent yawning (≥4 in an interval)	1									
Sweating	1									
Nasal stuffiness	1									
Sneezing (≥4 in an interval)	1									
Tachypnea (rate >60/min.)	2									
Poor feeding	2									
Vomiting (or regurgitation)	2									
Loose stools	2									
≤90% of birth weight	2									
Excessive irritability	1-3									
Total score										
Initials of scorer										

Printed Name	Signature/Title	Initials	Printed Name	Signature/Title	Initials

A New Approach: Eat, Sleep, Console (ESC)

- Yale New Haven Children's Hospital
- Developed based on observation of infants with NAS
- Focus on noninvasive functional assessment of infants with NAS
- Stresses the importance of non-pharmacologic approach

- **12% of infants needed morphine vs 62% if traditionally scored**
- **Average length of stay of 5.9 days**

ESC - Non-Pharmacologic Care is the First-Line Treatment

- “Does the Infant Have Poor Eating Due to NAS- Yes/No?”
- “Did the Infant Sleep Less Than 1 Hour After Feeding Due to NAS- Yes/No?”
- “Is the Infant Unable to be Consoled Within 10 Minutes due to NAS- Yes/No?”

ESC - Non-Pharmacologic Care is the First-Line Treatment

- Rooming-in with parent/caregiver throughout the baby's entire hospital stay
- Skin-to-skin contact
- Holding, gentle rocking, swaying
- Safe swaddling
- Optimal feeding at early hunger cues
- Quiet environment
- Non-nutritive sucking as needed
- Clustering infant's care
- Safe sleep/fall prevention
- May need additional help/support
 - cuddler/nurse/additional staff/student/etc.

Swedish Hospital Model: Family Centered Care- Mom is the Treatment

- Mother is the main caregiver
- Remove barriers to keep mom and baby together
- Empower the new mother, compassionate and welcoming approach
- Culture of non-judgment and acceptance
- Encourage breastfeeding, lactation, tobacco cessation
- Teamwork between mother and staff, huddle, joint effort
- First-line treatment for infants is non-pharm care-> reduces NAS/NOWS scores and need for pharmacologic treatment

COMPASSION MODEL

- **Community Of Maternal PArenting S**upport for **S**ubstance **I**mpacted **W**omen and **N**ewborns – 5- day extended postpartum stay for moms and babies
- **NOWS education** for patients, providers, nurses
- **Mom-baby-FOB/family support -> rooming-in**
- **Addiction/MAT stabilization/daily patient-centered rounding**
- **Bonding, breastfeeding, skin-to-skin, quiet environment**
- **Tobacco cessation, LARC**
- **Discharge coordination, timely SW/CPS collaboration-> CUPW, PPW**

COMPASSION MODEL

- **Community Of Maternal PArenting Support for Substance Impacted WOmen and Newborns**
- 40 women with OUD on Methadone (40-250mg qd), 60% homeless
- 20 women/baby couplets with standard postpartum floor discharge Day1-3
 - **80% babies needed morphine and prolonged NICU stay; NICU LOS 18days**
 - **50%** babies discharged to foster care
- 20 women/baby couplets with COMPASSION 5 day postpartum floor stay
 - **80% babies did not need morphine/NICU admission; NICU LOS 3.2days**
 - **80%** babies discharged with mom, mostly PPW

Myth #10 “I can’t breastfeed my baby if I’m on methadone”

Truth: Breastfeeding is SAFE!

- ENCOURAGE lactation/nursing!!!
- Enhances bonding; mother’s love
- Less than 1% methadone/buprenorphine is excreted in breast milk

Let the mother be the best treatment for her child and let her child be the best treatment for her mother

Breastfeeding and Mother's Love



Myth #11 “I plan to taper off once I deliver my baby”

MAT stigma leads to society pressure/discontinuation.

Discontinuation rates:

- Prenatal: 0-33%
- Postpartum: 26-64%
- 50% will be off methadone by 6 months -> 96% relapse rate

Truth: Encourage treatment as long as it is working.

- At least 1 year
- Provide education of MAT benefits, regular follow up and support

Supportive group MAT postpartum model (Swedish Ballard), March of Dimes

What would you say?

Jennifer comes in for a first prenatal visit at “about 7 months”.

- She delivered her first child 3 years ago at 36 weeks with no prenatal care. She was actively using at the time and the child was removed by CPS (lives with maternal grandmother).
- She has a sober environment and lives with her sister; hopes to start buprenorphine. Her boyfriend is using, but he lives with his mother.

“I really don’t want to lose this baby. Can you help me?”

What would you say?

Sarah is 31 years old with OUD on methadone. She is 35 weeks pregnant and her first baby was born at 33 weeks. She has been cramping feeling like she is going to go into labor.

She shares: “I’ve been keeping my dose low and I want to taper. I don’t want my baby to be *born addicted*”.

What would you say?

Maria is 36 year old and she just delivered her 4th baby. She has been stable on Methadone 150mg and wants to start breastfeeding. She feels frustrated after the day shift provider told her that “you should not breastfeed if you’re on Methadone”.

She is worried about what feels right.

Take home points:

- Opioid use disorder is a complex neurobiological, psychosocial disease; lots of myths/truths
- Opioid use disorder is not a moral failing
- MAT with methadone or buprenorphine is the standard of care to help with improved obstetrical outcomes!
- Bonding with baby and normalizing postpartum care improves mom/baby outcomes
- Compassionate, supportive and trauma-informed care helps vulnerable women

Talking about it is the hardest part Together we can make a difference

The mother wants a HEALTHY BABY and needs you.

- Community effort
- Improved engagement, education and support
- Normalize care with COMPASSION

Meeting needs of vulnerable and disadvantaged women

Compassionate care

Woman Empowerment

Yes, we can!

Yes, We Can!



Thank you!

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